

STATE UNIVERSITY OF NEW YORK  
New Paltz, New York.

**Solid State Device Physics**

Course No. 75495

Fall 2007

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**Text**

1. **Lectures on the Electrical Properties of Materials** by L. Solymar and D. Walsh. (Oxford University Press).

**Course Description**

This is a three credit course on Solid State Device Physics. It will cover the free electron theory for metals, band theory for solids, semiconductors and some examples of common semiconductor devices.

The following chapters of the text will be covered (some selected sections may be excluded).

Chap. 6	The free electron theory of metals.
Chap. 7	The band theory of solids.
Chap. 8	Semiconductors.
Chap. 9	Principles of semiconductor devices.

**Evaluation**

Midterm exam	40%
Final exam	60%